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Perkins, Brandon

From: Russ Maddox [redacted]
Sent: Tuesday, June 18, 2013 2:09 PM
To: Garcia, Lisa; Perkins, Brandon; Grass, Running
Subject: DHSS response
Attachments: Section of Epidemiology Sulfolane Response Letter 5 29 13.pdf

I'll have a summary of it all for you all tomorrow.

Thank you kindly, Russ

----- Forwarded Message -----
From: "Hamade, Ali K (HSS)" <ali.hamade@alaska.gov>
To: "[redacted]
Cc: "Ha, Nim (HSS)" <nim.ha@alaska.gov>
Sent: Wednesday, May 29, 2013 5:06 PM
Subject: Sulfolane

Dear Mr. Maddox,

Please find attached a response to some of the issues you raised as they pertain to sulfolane health matters and the possibility of conducting a health survey of the North Pole community.

We sincerely hope that this addresses your concerns. Please don't hesitate to call or e-mail Ms. Nim Ha or myself with any questions or ideas.

Best regards,

Ali

Ali Hamade, PhD, DABT
Environmental Public Health Program Manager
Alaska Section of Epidemiology
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THE STATE of ALASKA
GOVERNOR SEAN PARNELL

Department of Health and Social Services

DIVISION OF PUBLIC HEALTH
Section of Epidemiology

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May 29, 2013

Via Email:
russmaddox@yahoo.com
Russ Maddox

Dear Mr. Maddox:

We understand and share your frustration that so little is known about the toxicology of sulfolane. We hope to gain a better understanding of sulfolane toxicity from future studies that are planned by the National Toxicity Program. What we currently know about the health effects of sulfolane is limited to animal toxicity studies. These studies are focused on high-dose exposures over short and intermediate time periods. These data indicate that adverse health effects in animals occur in considerably higher concentrations than the levels seen in the wells of North Pole residents. Also, we lack the historical data necessary to determine how long people were exposed to sulfolane and what the exposure levels were prior to 2009.

Alaska Department of Health and Social Services (DHSS) Environmental Public Health Program (EPHP) staff members have devoted extensive time and resources in addressing this problem. Over the past 4 years, EPHP has:

- Learned about the sulfolane exposures in North Pole and the toxicology of sulfolane;
- Held numerous community meetings, workgroups, and open houses in North Pole;
- Conducted a limited study of health outcome data related to cancer and birth defects rates;
- Developed extensive health consultation addressing community health concerns;
- Prepared fact sheets for community members and other forms of health information;
- Nominated, in conjunction with the Department of Environmental Conservation and other state and federal partners, sulfolane successfully for further study and research by the National Toxicology Program; and
- Provided an ongoing direct point of contact (Nim Ha, MPH, 907-269-8000) for questions and concerns.

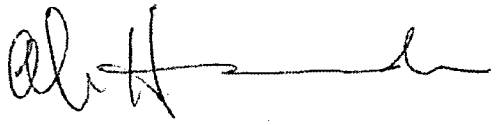
Some stakeholders have asked why DHSS has not conducted a more extensive health study to collect information about medical conditions and monitor disease outcomes potentially related to sulfolane exposure. Because performing an extensive health study often takes years and considerable resources to successfully implement and complete, there are many factors to consider before deciding to perform such studies. One of the major factors to consider is how successful a study might be in identifying a specific exposure-outcome association. Success of such studies depends on a number of attributes, including the following: 1) an ability to reasonably estimate or document individual exposure, 2) an ability to document or validate human health outcomes, 3) an adequate study size and statistical power, 4) an ability to

identify and locate subjects and records, 5) availability of an appropriate control or comparison population, 6) an ability to control for confounding factors and biases, and 7) an ability to determine the influence of environmental, behavioral, and other factors. Per our health consultation report dated January 19, 2012, we have not pursued an extensive health study because several of these critical attributes are lacking (see pages 22 and 23 of the health consultation report).

Due to the considerable limitations of performing an extensive health study in this situation, some stakeholders have suggested that EPHP staff investigate the potential for sulfolane-associated health effects in North Pole through other mechanisms besides the cancer and birth defects studies that were presented in the January 2012 health consultation report. One suggestion was for community health surveys to be performed. Health surveys can be useful in certain circumstances, such as when past exposures are well understood, specific disease endpoints (someone displaying signs/symptoms of a particular health condition) are reasonably expected, and the exposed population is large enough that one could reasonably expect to detect a sufficient number of cases of a particular health endpoint over time to identify a potential association with the exposure of interest. The Agency for Toxic Substances and Disease Registry (ATSDR) characterizes the attributes of successful "Type-1 Health Studies", which include health surveys, as follows: 1) a reasonable ability to document and characterize exposures in the target area, 2) an adequate study size for the type of study recommended, 3) an ability to identify and locate subjects and records, 4) appropriate comparison rates of occurrence, and 5) an ability to control confounding factors and biases. EPHP has not performed health surveys in North Pole because several of these attributes were not present with respect to the sulfolane exposures. Correspondingly, performing such a study despite the substantial limitations in this situation could raise false expectations that specific health conditions could be attributed to sulfolane exposure. That said, EPHP staff are dedicated to listening to and discussing this issue further with community members and other stakeholders who still feel as though health surveys are warranted.

EPHP staff members are committed to continue working with the North Pole community on this issue by listening to community concerns, staying abreast of new information as it becomes available, and responding appropriately using the best available evidence-based practices. As always, community members and other stakeholders are encouraged to contact EPHP to discuss ongoing health concerns (contact Nim Ha at 907-269-8000). EPHP staff will also be present at the community meeting in North Pole on June 25th.

Sincerely,



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